

Massachusetts Institute of Technology
Instrumentation Laboratory
Cambridge, Massachusetts

LUMINARY MEMO # 77

TO: Distribution
FROM: George W. Cherry
DATE: 3 April 1969
SUBJECT: Let's Continue the LUMINARY 1A Test Results Review

I would like to continue holding LUMINARY 1A test results reviews of the type we had a couple of weeks ago in my office. (I refer to the Pre-Pre-FACI reviews we held prior to the visit by the MSC folks.) I would like to change the composition of these meetings, however. In particular, I would like more 23A experts and 23C experts to participate and I would like to extend an invitation to 23S and 23D folks.

Also, I have in mind an important new objective of the meetings - the publication of a program and mission verification document bound in Apollo blue covers. Peter Peck in his usual tireless fashion has agreed to work as the editor of this document. He will attend the reviews and include in the document the tabulated data and plots and so on which the reviewing folks think ought to go in. We intend this document for an educated and knowledgeable audience and so we do not have to add very much explanatory prose. The audience we intend it for will gobble it up.

The Digital Autopilot verification document can be Vol. 1 of the Verification Document. Volume 2 will contain the other technological areas.

I leave it up to Peter Peck to decide whether we should enlist the aid of professional technical writers.

All contributors will be given credit in the forward and the individual chapters for their contributions.

I suggest that the chapters should be by technological area - for example:

1. Abort and Ascent
2. Landing
3. Orbital Maneuvers Powered Flight
4. Navigation
5. Targetting
6. Alignments
7. Miscellaneous (e.g., integration)
8. Rendezvous

I have talked to Bill Marscher about his folk's participation in the reviews. He has agreed. Tentatively he mentioned the following names for the areas.

Win Pickford - Abort and Ascent

Chung Pu
Bernie Kriegsman - Landing
Allan Klumpp
Don Gustafson

Gene Muller - Rendezvous and Navigation
Peter Kachmar

Pete Philliou - Orbital Maneuvers Powered Flight

I am giving a calendar of reviews for one week now and the review teams will schedule their own subsequent reviews. I think that the meetings should come about every three working days.

Navigation: Chairman - Pete Volante
10:00 AM Monday, 7 April 1969

Alignments: Chairman - Don Millard
2:00 PM Monday, 7 April 1969

Miscellaneous: Chairman - Bill Ostanek
First Meeting - Integration
10:00 AM Tuesday, 8 April 1969

Landing: Chairman - Bob Covelli

2:00 PM Wednesday 9 April 1969

Abort and Ascent: Chairman - Craig Schulenberg

10:00 AM Thursday 10 April 1969

Targetting: Chairman - Pat White

10:00 AM Friday 11 April 1969

The chairmen will periodically be changed. I have scattered the meetings so that folks like Dan Lickly, Bill Marscher, Jim Kernan, Craig Schulenberg, and myself can attend as many of the meetings as we like. The chairmen should at the very least conduct a meeting with Pete Peck and transmit whatever test results they want in the test document to him. I would hope they would do much more, however.

Among the objectives of each meeting will be the scheduling of the next meeting and a specification of the additional tests or data which should be run and collected before the next meeting. (We want to use plots as much as possible.)

The chairmen are responsible for defining the location of the meeting and the re-scheduling of the meeting if that is necessary. The chairmen should write a brief report of each meeting which assigns action items to be accomplished before the next meeting and defines unresolved problems and obstacles.

I expect the job of chairman to rotate between 23A and 23B.